



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,289	10/20/2003	James Edward Johnson	133476	3158
7590	10/03/2005			
Steven J. Rosen Patent Attorney 4729 Cornell Rd. Cincinnati, OH 45241				EXAMINER KIM, TAE JUN
				ART UNIT 3746 PAPER NUMBER

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/689,289	JOHNSON, JAMES EDWARD
	Examiner Ted Kim	Art Unit 3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 August 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) 2,6,9,13,23-40,42,46,49,53,56,60,62 and 66 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3-5,7,8,10-12,14-22,41,43-45,47,48,50-52,54,55,57-59,61,63-65,67 and 68 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10/20/2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, each and every feature of claim 48 including the fuselage and aircraft must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3746

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5, 7, 8, 10-12, 14-22, 41, 43-45, 47, 48, 50-52, 54, 55, 57-59, 61, 63-65, 67, 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (5,404,713) in view of any of Tindell (5,447,283), Creasey et al (2,956,759), Bullock (3,302,657), and Kerry et al (2,940,692) and optionally in view of any of EP 567277, Krebs et al (3,673,802) and Gruner (4,159,624). Johnson et al teach an aircraft propulsion system comprising: a gas turbine engine comprising; a fan section 32, at least one row of FLADE fan blades 5 disposed radially outwardly of and drivingly connected to the fan section, the row of FLADE fan blades radially extending across a FLADE duct 3 circumscribing the fan section, an engine inlet including a fan inlet to the fan section and an annular FLADE inlet to the FLADE duct 3; wherein the fan section includes axially spaced apart first 32 and second 34 counter-rotatable fans and the FLADE fan blades 5, are drivingly connected to one of the first and second counter-rotatable fans; further comprising a row of variable first FLADE vanes disposed axially forwardly of the row of FLADE fan blades; further comprising the row of FLADE fan blades disposed between an axially forward row of variable first FLADE vanes and an axially aft row of second FLADE vanes; wherein the fan section includes axially spaced apart first and

second counter-rotatable fans and the FLADE fan blades are drivingly connected to one of the first and second counter-rotatable fans; further comprising: a core engine 10, 18 located downstream and axially aft of the fan, a fan bypass duct located downstream and axially aft of the fan and circumscribing the core engine, and the FLADE duct circumscribing the fan bypass duct 78; wherein the fan section includes axially spaced apart first 32 and second 34 counter-rotatable fans and the FLADE fan blades are drivingly connected to one of the first and second counter-rotatable fans; further comprising: the core engine having in serial flow relationship a row of core driven fan stator vanes 86, a core driven fan with at least one row of core driven fan blades, a high pressure compressor 20, a combustor, and a high pressure turbine 24 drivingly connected to the core driven fan 38, the first and second counter-rotatable fans are radially disposed across an annular first fan duct, first and second low pressure turbines drivingly connected to the first and second counter-rotatable fans, the core driven fan is radially disposed across an annular second fan duct, a vane shroud dividing the core driven fan stator vanes into radially inner and outer vane hub and tip sections, a fan shroud dividing the core driven fan blades into radially inner and outer blade hub and tip sections, a first bypass inlet 46, 48 to the fan bypass duct 78 is disposed axially between the second counter-rotatable fan and the annular core engine inlet to the core engine, a fan tip duct across the vane tip sections of the core driven fan stator vanes and across the blade tip sections of the core driven fan blades extending to a second bypass inlet to the fan bypass duct, and a first varying means for independently varying a flow area of the vane tip

section; a second varying means for independently varying a flow area of the vane hub section; wherein the first and second varying means include independently varying vane tip sections and independently varying vane hub sections respectively; further comprising a front variable area bypass injector door in the first bypass inlet; the row of FLADE fan blades disposed radially outwardly of and drivingly connected to the second counter-rotatable fan, the high pressure turbine having a row of high pressure turbine nozzle stator vanes axially located between the combustor and a row of high pressure turbine blades of the high pressure turbine, the row of high pressure turbine blades 24 being counter-rotatable (col. 8, lines 9+) to the first low pressure turbine 28, and the row of high pressure turbine nozzle stator vanes, the row of high pressure turbine blades, the first row of low pressure turbine blades; the high pressure turbine having a row of high pressure turbine nozzle stator vanes 110 axially located between the combustor and a row of high pressure turbine blades of the high pressure turbine, the row of high pressure turbine blades being counter-rotatable to the first low pressure turbine, a row of fixed stator vanes 66 between the row of high pressure turbine blades and the first low pressure turbine; a variable throat area engine nozzle (col. 10, lines 1+) downstream and axially aft of the core engine, cooling apertures in the centerbody 72 and in a wall 222 of the engine nozzle in fluid communication with the FLADE duct. Johnson et al do not teach a fixed geometry inlet duct in direct flow communication with the engine inlet; further comprising the fixed geometry inlet duct having a two-dimensional convergent/divergent inlet duct passage with convergent and divergent sections, and a throat therebetween and

a transition section between the two-dimensional convergent/divergent inlet duct passage and the engine inlet. Tindell teach a fixed geometry inlet duct 2 in direct flow communication with the engine 8 inlet with benefits including fluidic variable inlet control and enhanced inlet performance (col. 2, lines 38-44) and reduced separation and allowing optimization of surge margin (col. 5, lines 1-12) as well as enhanced handling of supersonic flows into the inlet. Creasy et al teach a fixed geometry inlet duct 130 in direct flow communication with the engine inlet 155; further comprising the fixed geometry inlet duct having a two-dimensional convergent/divergent inlet duct passage with convergent and divergent sections, and a throat therebetween and a transition section between the two-dimensional convergent/divergent inlet duct passage and the engine inlet where the engine is a turbojet engine (col. 1, lines 26+) with the engines mounted in the engine fuselage (see fig. 4) as well as enhanced handling of supersonic flows into the inlet. Creasy teaches the inlet is isentropic (col. 3, circa line 46), i.e. with minimal losses, as well as enhanced handling of supersonic flows into the inlet. Bullock teach a fixed geometry inlet duct 2 in direct flow communication with the engine 12 inlet; further comprising the fixed geometry inlet duct having a two-dimensional (rectangular, col. 2, lines 30+) convergent/divergent inlet duct passage with convergent and divergent sections, and a throat therebetween and a transition section between the two-dimensional convergent/divergent inlet duct passage and the engine inlet 12 where the engine is a gas turbine engine (col. 3, lines 7+) and benefits include the ability to control the inlet flow as well as enhanced handling of shock waves (col. 1, lines 1-30) as well as enhanced

handling of supersonic flows into the inlet. Kerry et al teach a fixed geometry inlet duct 37 in direct flow communication with the engine inlet to from a smooth continuation of the inlet of the engine (col. 3, lines 8+) with the engines within the aircraft fuselage as an equivalent to the wings (col. 1, lines 42+). It would have been obvious to one of ordinary skill in the art to employ a fixed geometry inlet duct with the configuration above, in order to provide a well known type of inlet for the gas turbine engine of Johnson et al with advantages including reduced flow losses and/or to allow control the inlet flow as well as enhanced handling of shock waves and/or to provide a smooth streamlined inlet and/or enhanced handling of supersonic flows into the inlet. It would have been obvious to one of ordinary skill in the art to employ the engine in the fuselage, as a well known configuration taught by the art as equivalent to the wing mounting arrangement (note that Johnson '638; col. 9, lines 43+ and Ball '772 also shown an arrangement is utterly conventional with gas turbine engines). Johnson et al do not teach the afterburner. EP '277 teaches it is old and well known in the art to employ an afterburner (col. 5, lines 54+). It would have been obvious to employ an afterburner to augment the thrust. Johnson et al teach various aspects of the claimed invention but do not teach two low pressure turbines stages. Krebs et al teach a turbine with a high pressure turbine stage 36 and low pressure turbine stages 38 with low pressure turbines 76 is old and well known in the art. It would have been obvious to one of ordinary skill in the art to add an additional low pressure turbine stage as taught by Krebs et al, in order to facilitate more complete turbine expansion. Gruner teaches a high pressure turbine 58 and counterrotating low

pressure turbines 49 and 59. It would have been obvious to one of ordinary skill in the art to employ the low pressure counterrotating turbine arrangement, as taught by Gruner, to employ a compact arrangement.

4. Claims 1, 3-5, 7, 8, 10-12, 14-22, 41, 43-45, 47, 48, 50-52, 54, 55, 57-59, 61, 63-65, 67, 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 567277 in view of any of Tindell (5,447,283), Creasey et al (2,956,759), Bullock (3,302,657), and Kerry et al (2,940,692) and optionally in view of any of Johnson (5,404,713) Krebs et al (3,673,802) and Gruner (4,159,624). EP '277 teaches an aircraft propulsion system comprising: a gas turbine engine comprising; a fan section 11, at least one row of FLADE fan blades 11 disposed radially outwardly of and drivingly connected to the fan section 11, the row of FLADE fan blades radially extending across a FLADE duct 34 circumscribing the fan section 11, an engine inlet including a fan inlet to the fan section and an annular FLADE inlet to the FLADE duct; further comprising a row of variable first FLADE vanes 15 disposed axially forwardly of the row of FLADE fan blades; further comprising the row of FLADE fan blades disposed between an axially forward row of variable first FLADE vanes and an axially aft row of second FLADE vanes; wherein the fan section includes axially spaced apart first 13 and second rotatable fans 11 and the FLADE fan blades 11 are drivingly connected to one of the first and second rotatable fans 11; further comprising: a core engine located downstream and axially aft of the fan 13, a fan bypass duct 16, 32 located downstream and axially aft of the fan and circumscribing the core engine, and the FLADE duct circumscribing the fan bypass duct;

wherein the fan section includes axially spaced apart first and second rotatable fans and the FLADE fan blades are drivingly connected to one of the first and second rotatable fans; further comprising: the core engine having in serial flow relationship a row of core driven fan stator vanes, a core driven fan with at least one row of core driven fan blades, a high pressure compressor (unlabeled), a combustor, and a high pressure turbine (unlabeled) drivingly connected to the core driven fan, the first and second rotatable fans are radially disposed across an annular first fan duct, first and second low pressure turbines (unlabeled) drivingly connected to the first and second rotatable fans, the core driven fan is radially disposed across an annular second fan duct, a vane shroud dividing the core driven fan stator vanes into radially inner and outer vane hub and tip sections, a fan shroud dividing the core driven fan blades into radially inner and outer blade hub and tip sections, a first bypass inlet to the fan bypass duct is disposed axially between the second rotatable fan and the annular core engine inlet to the core engine, a fan tip duct across the vane tip sections of the core driven fan stator vanes and across the blade tip sections of the core driven fan blades extending to a second bypass inlet to the fan bypass duct, and a first varying means for independently varying a flow area of the vane tip section; a second varying means for independently varying a flow area of the vane hub section; wherein the first and second varying means include independently varying vane tip sections and independently varying vane hub sections respectively; further comprising a front variable area bypass injector door in the first bypass inlet; the row of FLADE fan blades disposed radially outwardly of and drivingly connected to the second rotatable fan,

the high pressure turbine having a row of high pressure turbine nozzle stator vanes axially located between the combustor and a row of high pressure turbine blades of the high pressure turbine, the row of high pressure turbine blades being rotatable to the first low pressure turbine, a row of variable low pressure stator vanes between first and second rows of low pressure turbine blades of the first and second low pressure turbines respectively, and the row of high pressure turbine nozzle stator vanes, the row of high pressure turbine blades, the first row of low pressure turbine blades, the row of variable low pressure stator vanes, and the second row of low pressure turbine blades being in serial axial and downstream relationship; the high pressure turbine having a row of high pressure turbine nozzle stator vanes axially located between the combustor and a row of high pressure turbine blades of the high pressure turbine, the row of high pressure turbine blades being rotatable to the first low pressure turbine, a row of fixed stator vanes between the row of high pressure turbine blades and the first low pressure turbine, no vanes between the first and second rows of low pressure turbine blades of the first and second low pressure turbines respectively, and the row of high pressure turbine nozzle stator vanes, the row of high pressure turbine blades, the row of fixed stator vanes, the first row of low pressure turbine blades, and the second row of low pressure turbine blades being in serial axial and downstream relationship. EP '277 do not teach a fixed geometry inlet duct in direct flow communication with the engine inlet; further comprising the fixed geometry inlet duct having a two-dimensional convergent/divergent inlet duct passage with convergent and divergent sections, and a throat therebetween and

a transition section between the two-dimensional convergent/divergent inlet duct passage and the engine inlet. Tindell teach a fixed geometry inlet duct 2 in direct flow communication with the engine 8 inlet with benefits including fluidic variable inlet control and enhanced inlet performance (col. 2, lines 38-44) and reduced separation and allowing optimization of surge margin (col. 5, lines 1-12) as well as enhanced handling of supersonic flows into the inlet. Creasy et al teach a fixed geometry inlet duct 130 in direct flow communication with the engine inlet 155; further comprising the fixed geometry inlet duct having a two-dimensional convergent/divergent inlet duct passage with convergent and divergent sections, and a throat therebetween and a transition section between the two-dimensional convergent/divergent inlet duct passage and the engine inlet where the engine is a turbojet engine (col. 1, lines 26+) as well as enhanced handling of supersonic flows into the inlet. Creasy teaches the inlet is isentropic (col. 3, circa line 46), i.e. with minimal losses, as well as enhanced handling of supersonic flows into the inlet. Bullock teach a fixed geometry inlet duct 2 in direct flow communication with the engine 12 inlet; further comprising the fixed geometry inlet duct having a two-dimensional (rectangular, col. 2, lines 30+) convergent/divergent inlet duct passage with convergent and divergent sections, and a throat therebetween and a transition section between the two-dimensional convergent/divergent inlet duct passage and the engine inlet 12 where the engine is a gas turbine engine (col. 3, lines 7+) and benefits include the ability to control the inlet flow as well as enhanced handling of shock waves (col. 1, lines 1-30) as well as enhanced handling of supersonic flows into the inlet. Kerry et al teach a

fixed geometry inlet duct 37 in direct flow communication with the engine inlet to from a smooth continuation of the inlet of the engine (col. 3, lines 8+) with the engines within the aircraft fuselage as an equivalent to the wings (col. 1, lines 42+). It would have been obvious to one of ordinary skill in the art to employ a fixed geometry inlet duct with the configuration above, in order to provide a well known type of inlet for the gas turbine engine of Johnson et al with advantages including reduced flow losses and/or to allow control the inlet flow as well as enhanced handling of shock waves and/or to provide a smooth streamlined inlet and/or enhanced handling of supersonic flows into the inlet. It would have been obvious to one of ordinary skill in the art to employ the engine in the fuselage, as a well known configuration taught by the art as equivalent to the wing mounting arrangement (note that Johnson '638; col. 9, lines 43+ and Ball '772 also shown an arrangement is utterly conventional with gas turbine engines). EP '277 teach the flade engine but does not specifically mention the counter-rotating fans or turbines. However, Johnson et al teach that it is old and well known in the art to employ counter-rotating fans or turbines in the claimed shaft arrangement, in order to facilitate a more compact arrangement. The variable stator blades between the low pressure turbine stages or the elimination of thereof is also well known depending on whether the turbines are counter-rotating or not. It would have been obvious to one of ordinary skill in the art to employ counter-rotating arrangements, in order to facilitate a compact assembly. It would have been obvious to one of ordinary skill in the art to employ variable stator blades or eliminate them, as being well known in the turbine art as well known

expedients for turbine construction. EP '277 does not teach second variable FLADE blades. Johnson et al further first and second variable FLADE blades for controlling the FLADE airflow. EP '277 does not teach the cooled nozzle centerbody. Johnson et al teach; a variable throat area engine nozzle (col. 10, lines 1+) downstream and axially aft of the core engine, cooling apertures in the centerbody 72 and in a wall 222 of the engine nozzle in fluid communication with the FLADE duct. It would have been obvious to one of ordinary skill in the art to cool the centerbody and nozzle in order to reduce infrared emissions and/or prolong its life. Krebs et al teach a turbine with a high pressure turbine stage 36 and low pressure turbine stages 38 with low pressure turbines 76 is old and well known in the art. It would have been obvious to one of ordinary skill in the art to add an additional low pressure turbine stage as taught by Krebs et al, in order to facilitate more complete turbine expansion. Gruner teaches a high pressure turbine 58 and counterrotating low pressure turbines 49 and 59. It would have been obvious to one of ordinary skill in the art to employ the low pressure counterrotating turbine arrangement, as taught by Gruner, to employ a compact arrangement.

***Response to Arguments***

5. Applicant's arguments filed 08/16/2005 have been fully considered but they are not persuasive. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Tindell teach a fixed geometry inlet duct 2 in direct flow communication with the engine 8 inlet with benefits including fluidic variable inlet control and enhanced inlet performance (col. 2, lines 38-44) and reduced separation and allowing optimization of surge margin (col. 5, lines 1-12) as well as enhanced handling of supersonic flows into the inlet. Creasy et al teach a fixed geometry inlet duct 130 in direct flow communication with the engine inlet 155; further comprising the fixed geometry inlet duct having a two-dimensional convergent/divergent inlet duct passage with convergent and divergent sections, and a throat therebetween and a transition section between the two-dimensional convergent/divergent inlet duct passage and the engine inlet where the engine is a turbojet engine (col. 1, lines 26+) as well as enhanced handling of supersonic flows into the inlet. Creasy teaches the inlet is isentropic (col. 3, circa line 46), i.e. with minimal losses, as well as enhanced handling of supersonic flows into the inlet. Bullock teach a fixed geometry inlet duct 2 in direct flow communication with the engine 12 inlet; further comprising the fixed geometry inlet duct having a two-dimensional (rectangular, col. 2, lines 30+) convergent/divergent inlet duct passage with convergent and divergent sections, and a throat therebetween and a transition section between the two-dimensional convergent/divergent inlet duct passage and the engine inlet 12 where the engine is a gas turbine engine (col. 3, lines 7+) and benefits include the ability to control the inlet flow as well as enhanced handling of shock

waves (col. 1, lines 1-30) as well as enhanced handling of supersonic flows into the inlet.

Kerry et al teach a fixed geometry inlet duct 37 in direct flow communication with the engine inlet to from a smooth continuation of the inlet of the engine (col. 3, lines 8+).

Reasons for combining include providing a well known type of inlet for the gas turbine engine of Johnson et al with advantages including reduced flow losses and/or to allow control the inlet flow as well as enhanced handling of shock waves and/or to provide a smooth streamlined inlet and/or enhanced handling of supersonic flows into the inlet.

6. Applicant's arguments are not persuasive regarding Johnson and EP '277 are not persuasive as the inlets of the applied prior art allow for a greater control over the inlet flow and thus the inlet flow will be matched to the needs of the engine.

7. Furthermore, applicant's arguments with regard to Bullock are not persuasive as the inlet is fixed structurally. While there may be flow escaping, applicant's claims do not specifically limit the claims to a sealed inlet structure.

8. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

9. In response to applicant's argument that Johnson does not teach the fan section is upstream of the bypass fan duct, after amendment of claims 3, etc. the fan 34 is still upstream of a portion of the fan bypass duct or alternately, the fan bypass duct can be considered the aggregate of the outer annular duct in which 5, 7 reside and which handle flow 78. In this case, both fans are "upstream" of their relative bypass duct. Applicant has not sufficiently structurally defined these fans to overcome the Johnson reference.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ted Kim whose telephone number is 571-272-4829. The

Examiner can be reached on regular business hours before 5:00 pm, Monday to Thursday and every other Friday.

The fax numbers for the organization where this application is assigned are 571-273-8300 for Regular faxes and 571-273-8300 for After Final faxes.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe, can be reached at 571-272-4444.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist of Technology Center 3700, whose telephone number is 703-308-0861. General inquiries can also be directed to the Patents Assistance Center whose telephone number is 800-786-9199. Furthermore, a variety of online resources are available at <http://www.uspto.gov/main/patents.htm>

Ted Kim	Telephone	571-272-4829
Primary Examiner	Fax (Regular)	571-273-8300
September 30, 2005	Fax (After Final)	571-273-8300
Technology Center 3700 Receptionist	Telephone	703-308-0861
Patents Assistance Center	Telephone	800-786-9199